

**Jetstream-31 (J31) Flight Report for INTEx-ITCT
Flight 24 - 8 August 2004**

Aqua overpass at 1354 UT

Cabin Crew: Eilers, Livingston, Pommier, Schmid.

Overview

This was the 18th J31 flight out of Pease. Goals focused on MODIS validation for the Aqua overpass at 1354 UT. All goals were met.

J31 and its instruments performed well.

Flight Path, Timing, and Measurements

Flight path is shown in Figure 1 below. Take off at 1706 UT.

Climbed to 11,000' out of Pease. Spiral down to ~200'.

Very low AOD (with gradients) along extended ~200' run from 70W to 68W, 42.75N;
Profiles up/down 200' to 11,000'; reversed course, level leg at 11,000' ; ramped descent to 200 ft (kept pitch within 3 deg fro SSFR); followed by level leg at 200' until climbing required for RTB.

Touchdown at 1853 UT.

Instrument status

AATS-14; OK

POS: OK.

Nav/Met: OK

SSFR:OK

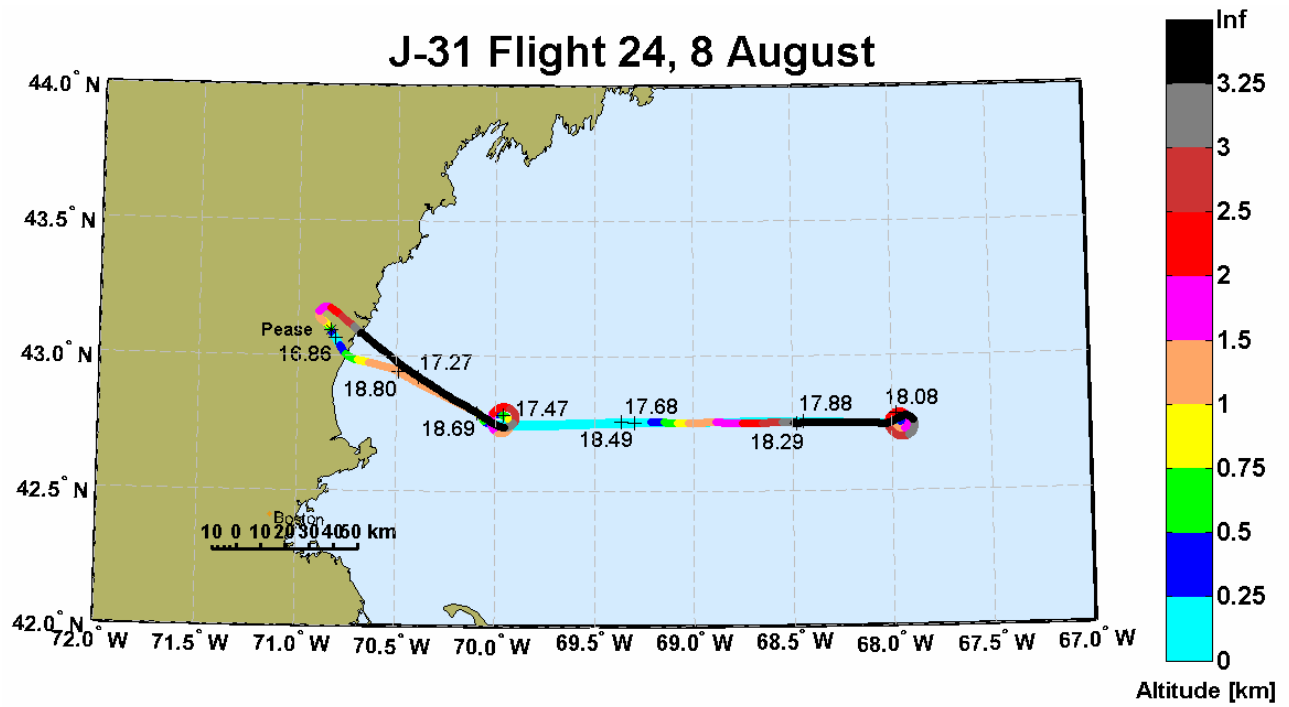


Figure 1. Flight track of J-31, Flight 24, August 8, 2004.

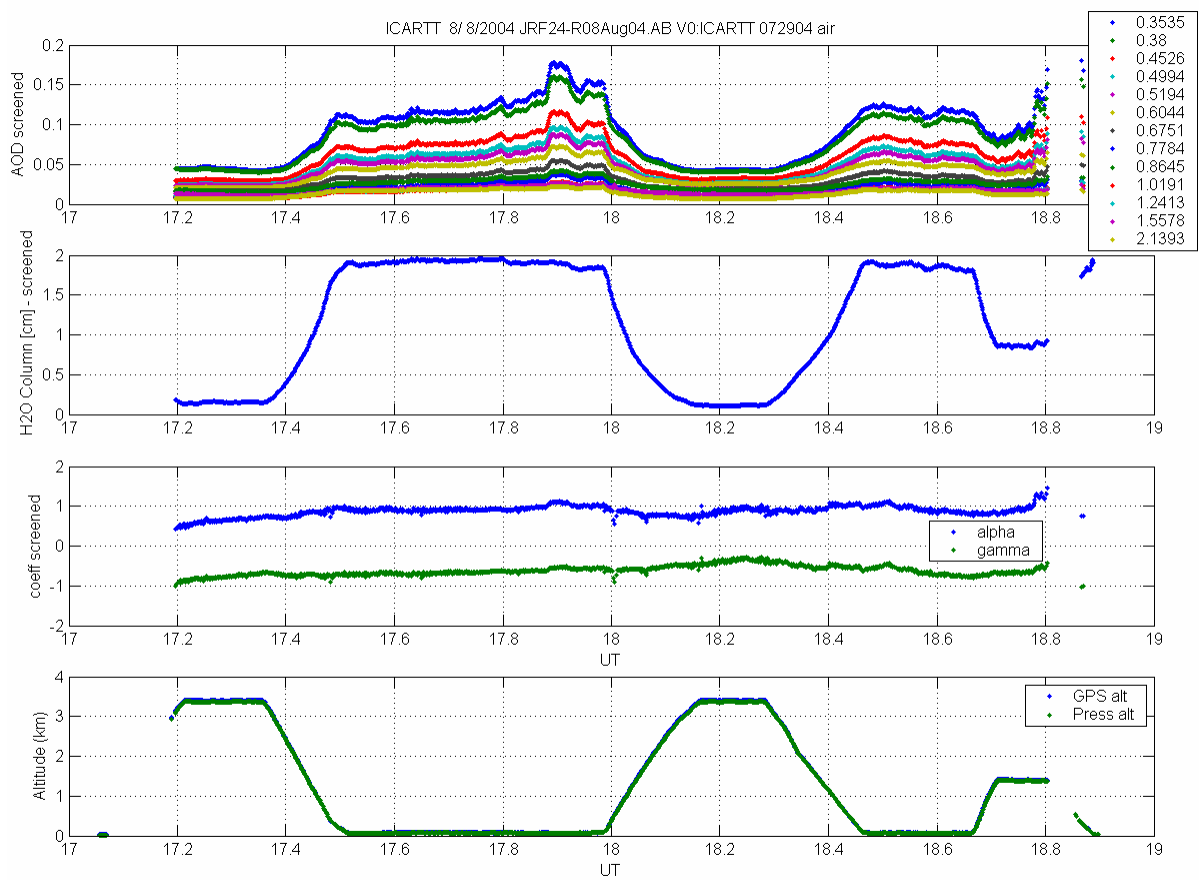


Figure 2. Time series of AATS-14 retrieved AOD, water vapor column, spectral coefficients and flight altitude for J-31 Flight 24, August 8, 2004.

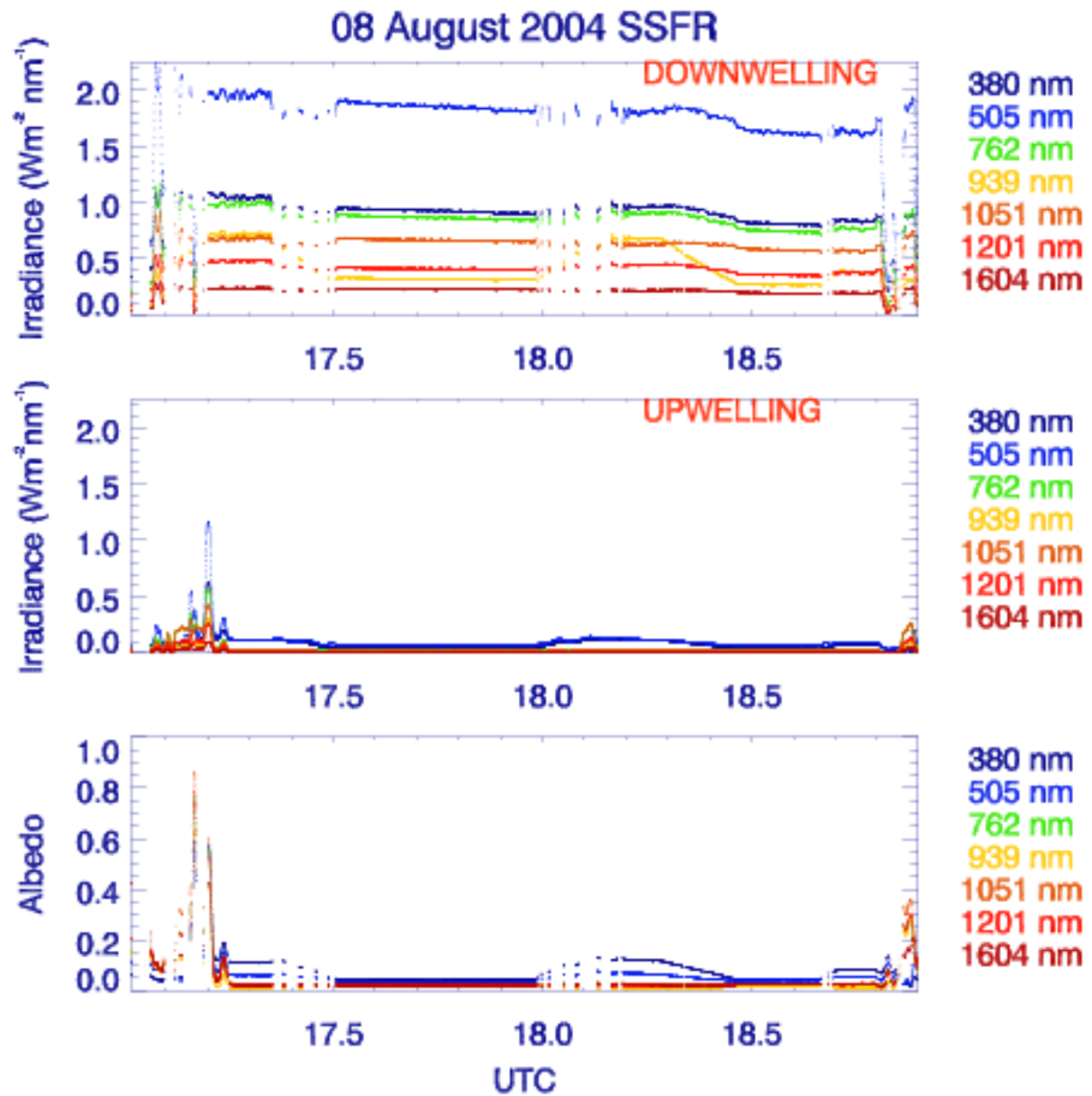


Figure 3. Time series of SSFR-measured downwelling and upwelling irradiance and albedo for J31 Flight 24, Aug 8, 2004. The downwelling (and albedo) has been filtered to remove data when the aircraft attitude deviated by more than 3% from level. The fact that J31 was in a spiral for some of the flight produces the speckled pattern in the downwelling and albedo time series.